

Listing of Claims

1. (Currently Amended) A method of preparing a plurality of data streams to allow seamless switching between said data streams by a switching device, wherein said switching device includes data stream buffering for an output data stream, said method comprising the steps of:

preparing said plurality of data streams prior to transmitting said plurality of data streams to said switching device, wherein said preparing comprises:

providing a plurality of data streams, said data streams including data which is divided into segments, wherein said segments include synchronized starting points and end points on all of said plurality of data streams;

multiplexing said plurality of data streams for delivery to said switching device; and

increasing a data rate of said multiplexed plurality of data streams from a first data rate to a second data rate at a time before an end point of each segment by changing the multiplexing for said plurality of streams to provide gaps in said plurality of data streams between said end points and said starting points wherein such changing of multiplexing does not affect the contents of said plurality of data streams, and wherein said plurality of data streams are processed at least in part on a serial basis; and

after preparing said plurality of data streams, transmitting said multiplexed data streams to said switching device.

2. (Original) The method of claim 1 further including the step of inserting trigger gap indicators in said plurality of data streams proximate said end points.

3. (Original) The method of claim 1, wherein the step of increasing a data rate includes increasing a bandwidth of said plurality of data streams.

4. (Cancelled)

5. (Cancelled)

6. (Original) The method of claim 1, wherein the step of increasing a data rate includes compressing said data of said plurality of data streams.

7. (Original) The method of claim 1, wherein said plurality of data streams include multimedia data streams.
8. (Original) The method of claim 7, wherein said plurality of data streams include MPEG-2 encoded data streams.
9. (Original) The method of claim 8, wherein said plurality of data streams are multiplexed in an MPEG-2 transport stream.
10. (Cancelled)
11. (Original) The method of claim 7, wherein said plurality of data streams include AC3 encoded data streams.
12. (Original) The method of claim 1 further including the step of switching from one of said plurality of data streams to another one of said plurality of data streams at an end point of a segment by said switching device.
13. (Currently Amended) A system for preparing a plurality of data streams for transmission by a multiplexed transport stream, said system to allow a receiver receiving said transmitted data streams to seamlessly switch between said transmitted data streams; said system comprising:
 - a content preparation component, coupled to a source of said plurality of data streams to prepare and encode content in said plurality of data streams with synchronized starting points and end points common to all of said plurality of data streams prior to transmitting said plurality of data streams to said receiver;
 - a gap creation component, coupled to said content preparation component, said gap creation component being configured to insert gaps in said plurality of data streams between said end points and said starting points; and
 - a data rate control component, coupled to said gap creation component, to dynamically control data rates of said plurality of data streams by changing the multiplexing of said plurality of said plurality of data streams, wherein such changing of multiplexing does not affect the contents of said plurality of data streams, ~~and~~ wherein said data rate control component increases said data rate of said multiplexed data streams from a first data rate to a second data rate at a time before an end point of each segment to insert the gaps in said plurality of data streams between said end points and said starting points, and wherein said plurality of data streams are processed at least in part on a serial basis.

14. (Original) The system of claim 13 further including:
a trigger insertion component, coupled to said data rate control component, said trigger insertion component to insert trigger messages into said plurality of data streams.

15. (Original) The system of claim 13 wherein said plurality of data streams are transmitted using an MPEG-2 compliant transport system, and said data rate control component controls data rates of said data streams in said transport stream.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)